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TI **Freezing** of vegetables by direct contact with aqueous solutions of **ethanol** and **sodium** chloride.

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SO Journal of Food Science, (1977), 42 (4) 911-916, 21 ref.

DT Journal

LA English

AB Aqueous **freezant** (AF 15-15) consisting of 15% NaCl and 15% **ethanol** with a -19.3°F solubility limit was developed for direct contact **freezing** of vegetables. Carrots (3/8-in dice) and peas were **frozen** and **cooled** to 2.5°F in 1.5 min of immersion and beans (1-in cut) and whole kernel corn were **frozen** and **cooled** to 2.5°F in 2.5 min of immersion. AF 15-15 **frozen** and blotted peas, beans and corn contained 0.72-0.82% NaCl and were statistically indistinguishable from air-blast **frozen** vegetables in organoleptic ratings. Air-blast **frozen** carrot dice were preferred over AF 15-15 **frozen** dice which contained 1.77% NaCl. A mixture of all of the above vegetables **frozen** in AF 15-15 was slightly favoured over an air-blast **frozen** mixture (6.7 vs. 5.8 score). AF 15-15 **frozen** vegetables showed a small (2.3-0.9%) weight gain, whereas the air-blast **frozen** vegetables showed losses of 3.9-13.3% with respect to fresh weight

CC J (Fruits, Vegetables and Nuts)

CT **ETHANOL**; **FREEZING**; **FROZEN FOODS**; SALT; SENSORY ANALYSIS; VEGETABLES; CONTACT; **ETHYL ALCOHOL**; **FREEZANTS**; **FROZEN**; NACL; ORGANOLEPTIC EVALUATION